

Dr. Ronald L. SimardSENIOR DIRECTOR, NEW PLANT DEPLOYMENT NUCLEAR GENERATION DIVISION

April 30, 2003

Mr. James E. Lyons
Director, New Reactor Licensing Project Office
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

SUBJECT: Resolution of Generic Topic ESP-22 (Form and Content of an Early Site Permit)

PROJECT 689

Dear Mr. Lyons:

In several public meetings with the NRC staff between August 22, 2002, and March 5, 2003, we discussed generic topic ESP-22, which concerns the nature of envisioned NRC findings for an ESP that is based on the plant parameters envelope (PPE) approach (generic topic ESP-6).

In its February 5, 2003, letter on ESP-6, the NRC staff agreed that "ESP applicants may use the PPE approach as a surrogate for actual facility information to support required safety and environmental reviews." In our discussions of the PPE approach, the pilot ESP applicants emphasized the importance of common understandings concerning ESP findings because it is these findings that will determine the future value of an ESP, e.g., in a COL proceeding.

We provided a draft ESP for NRC staff discussion and comment during our August 22 public meeting and included it with our December 20, 2002, resolution letter on ESP-6. The draft ESP reflects the PPE approach adopted by the pilot ESP applicants. Findings are proposed that provide the clarity and certainty that ESP applicants consider (1) necessary to support possible future COL applications that reference an ESP, and (2) appropriate given the extensive evaluations and reviews to be performed as part of the ESP application, review and hearing process.

Prior to our March 5 public meeting, the NRC staff indicated that it would be premature to provide feedback to the industry on the draft ESP until after a better understanding of the PPE approach was established. Having now accomplished that as noted above, the staff indicated on March 5 that they would be able to provide substantive feedback on the industry's draft ESP.

Mr. James E. Lyons April 30, 2003 Page 2

Enclosure 1 provides Revision 1 of our draft ESP for NRC staff review and comment. Slight changes from the version previously provided to the staff are noted. Detailed comments, e.g., wording, would be welcome, but are not necessary at this time. Our primary interest is in NRC staff feedback confirming that ESP findings envisioned by the staff are equivalent in substance to those we have proposed, i.e., findings that provide for adequate clarity and certainty; that are commensurate with the extensive ESP application, review and hearing process; and that provide for the intended finality of site suitability issues in a future COL proceeding, including safety, environmental and emergency planning issues.

We also request that the staff identify conditions, terms and limitations of a generic nature that the staff foresees specifying in ESPs and to indicate the basis for each. For example, On March 7, the staff identified to the ACRS its plans to include an ESP condition "requiring reporting of information having significant implication for public health and safety."

NRC feedback concerning the nature of NRC findings for ESPs based on the PPE approach and the conditions, terms and limitations that may be placed on them is important to provide pilot ESP applicants with an adequate understanding of the value of ESPs that may be granted by the NRC. So that this feedback may further inform the pilot applicants' final preparations and decisions concerning submittal of first-ever ESP applications, your response in this regard is requested within 30 days. If the staff response identifies significant limitations or ESP findings that are substantially different from the enclosure, it may be appropriate to schedule another public meeting to discuss ESP form and content.

Enclosure 2 provides for your use an updated list and status of generic ESP topics that have been identified for discussion during the pre-application period.

We look forward to your feedback on the enclosed draft form and content for an ESP. If you have any questions concerning this request, please contact Russ Bell (rjb@nei.org or 202-739-8087).

Sincerely

Ron Simard

Enclosures

c: Ronaldo V. Jenkins, NRC/NRR NRC Document Control Desk

Enclosure 1 Draft ESP Form and Content – Revision 2 – April 30, 2003

[ELECTRICITY PRODUCTION COMPANY] DOCKET NO. 52-[###] [NAME OF SITE] EARLY SITE PERMIT

Early Site Permit No. ESP-[001]

{Based on old construction permit wording and current Part 52 regulations}

- 1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for an early site permit filed by [Name of Applicant] (the Applicant) complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's regulations set forth in Title 10, Chapter I, Code of Federal Regulations (10 CFR), and all required notifications to other agencies or bodies have been duly made;

 $\{Based\ on\ \S 52.24\}$

B. The Applicant has sufficiently identified and assessed the site characteristics pertinent to the protection of the health and safety of the public and assessment of environmental impacts for the [Name of Site] (the site);

 $\{Based\ on\ \S 100.20-100.23\}$

C. The Applicant has defined a sufficient set of design-parameters for purposes of assessing the safety and environmental impacts of a future nuclear facility or facilities having characteristics that fall within the set of parameters defined in the application;

{Based on §52.17}

- D. On the basis of the foregoing, there is reasonable assurance that, taking into consideration in accordance with the site criteria contained in 10 CFR Part 100, "Reactor Site Criteria," a reactor, or reactors, having characteristics that fall within the site characteristics and design parameters identified in the application can be constructed and operated without undue risk to the health and safety of the public;
 - {Based on §§52.21, 52.18, and 52.17(a)(1)}
- E. The issuance of this early site permit will not be inimical to the common defense and security or to the health and safety of the public; and

Draft ESP, Revision 2 April 30, 2003 Page 2

{Standard permit and license wording per §103 of the Act}

F. There is no significant impediment to the development of any emergency plan;

alternatively include, (Option 1)

and major features of the emergency plans submitted by the Applicant are acceptable;

alternatively include, (Option 2)

and the emergency plans submitted by the Applicant provide reasonable assurance that adequate protective measures can and will be taken in the event of a radiological emergency.

 $\{Based\ on\ \S\S52.18\ and\ 52.17(b)(1)\ and\ (2)\}$

G. After considering the environmental review of the site, including effects of construction and operation of a reactor, or reactors, which have characteristics that fall within the site characteristics and design-parameters identified in the permit application, and including the evaluation of alternative sites*, the issuance of this early site permit is in accordance with 10 CFR Part 51, "Environmental Protection Regulations for Domestic Licensing and Related Regulatory Functions," and all applicable requirements have been satisfied.

 $\{Based\ on\ \S\S52.18\ and\ 52.17(a)(2)\}$

*Refer to ESP-18A

- 2. Based on the foregoing findings regarding the site, pursuant to Section 103 of the Act, and 10 CFR Part 52, Subpart A, "Early Site Permits," [and pursuant to the Atomic Safety and Licensing Board's Initial Decision, dated [month, day, year],] the Commission hereby issues Early Site Permit No. ESP-[001] to [Name of Applicant] for the site in [Town, County, State].
- 3. This permit shall be subject to all applicable provisions of the Act, and rules, regulations, and orders of the Commission now or hereafter in effect; and is subject to the conditions, terms, and limitations specified or incorporated below:
 - A. [Name of Applicant] is authorized to perform activities at the site allowed by 10 CFR 50.10(e)(1) as described in its application;

Draft ESP, Revision 2 April 30, 2003 Page 3

[alternative: No authority to perform activities at the site allowed by 10 CFR 50.10(e)(1) is granted;] and

 $\{Based\ on\ \S 52.25\}$

B. References to this early site permit shall be deemed to include the site characteristics and design parameters identified in the permit application.

{Based on §52.24 - Reflects proposed language in May 8, 2002, redline draft proposed rule}

4. Except as provided in 10 CFR 52.25(b) and 52.27 (b) and (c), this permit expires on [20 years after issuance];

 $\{Based\ on\ \S\S\ 52.25(b)\ and\ 52.27(a)\}$

5. This permit is effective as of its date of issuance and shall expire as set forth in paragraph 4.

FOR THE NUCLEAR REGULATORY COMMISSION

Director, Division Office of Nuclear Reactor Regulation

Date of Issuance: [Month day, year]

Enclosure 2 Status of Generic ESP Interactions/Topics – April 30, 2003

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ESP Topic	NEI Resolution Letter	NRC Response	Status/Remarks (Concerns highlighted)
ESP application form & content and ESP review guidance	*Later		 Industry comments on ESP Review Standard (RS-002) provided 3/31 More time to be provided for late sections on QA, Security, and Dose Consequence Analyses (available in April) * ESP-1 resolution letter to follow RS-002 review/comment/revision process
2. ESP inspection guidance	Post- IMC- 2501		 IMC-2501 to be conformed to resolution of ESP-3 (QA) IMC-2501 and ESP inspection procedures to be completed to support June submittals
2a. Pre-application interactions (voluntary nature, plans for local public mtgs & review fee structure)	11/26	1/10	Resolved
QA requirements for ESP information	12/20	2/3	 Follow-up questions discussed on Mar. 5 Continuing concern about NRC expectations for Appendix B-equivalent controls Comments due 6/13 on RS-002 Section 17.1.1
4. Nominal NRC review timeline	Target 5/1		 NRC discussed ESP review timeline on 1/29 Industry may propose ways to reduce overall time to ESP
Mechanism for documenting resolution of ESP issues	9/10	11/5	Resolved NRC provided supplemental response on 4/17
6. Use of plant parameters envelope (PPE) approach	12/20	2/5	Resolved
7. Guidance for satisfying §52.17(a)(1) requirements	a. 12/20	2/5	Supplemental resolution letter addresses continuing concern about nature of dose analyses to be provided by pilot applicants NRC revised Section 15 of RS-002 based on
	b. 4/10		March 5 discussions; comments due 6/13 NEI to continue to pursue more optimal resolution (i.e., sole focus for ESP on Chi/Q) via RS-002 and other means
8. Fuel cycle and transportation impacts (Tables S-3 & S-4)	Target May	• "	 Industry preparing resolution letter based on March 26 discussion w/NRC
Criteria for assuring control of the site by the ESP holder	Target 5/2		Resolution Pending
10. Use of License Renewal GEIS for ESP	2/6	4/1	Evaluating NRC response
11. Criteria for determining ESP duration (10-20 years)	12/20	2/5	Resolved
12. NEPA consideration of severe accident issues (SAMAs and	a. 12/20	2/12	Follow-up letter planned based on March 26 discussion w/NRC to clarify treatment in ESPAs of
impacts) 13. Guidance for ESP seismic evaluations	b. 4/28 4/25	n/a	severe accident impacts Resolution pending

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ESP Topic	NEI Resolution Letter	NRC Response	Status/Remarks (Concerns highlighted)
Applicability of Federal requirements concerning environmental justice	*None		 Commission action pending in response to Dec. 20 NEI letter No ESP-specific discussion of EJ or ESP-14 resolution letter necessary*
15. Appropriate level of detail for site redress plans	11/26	1/16	Resolved
16. Guidance for ESP approval of emergency plans	4/7		Resolution pending
17. Petition to eliminate duplicative NRC review of valid existing site/facility information	*None		 Commission action pending on petition PRM-52-1 No ESP-specific discussion or ESP-17 resolution letter necessary*
18. Petition to eliminate reviews for alternate sites, sources and need for power	*None		 Supplemental industry comments on PRM-52-2 provided on Dec. 18 Staff recommendation and Commission action pending No ESP-specific discussion or ESP-18 resolution letter necessary*
18a Alternative site reviews	12/20	3/7	March 31 industry comments on RS-002 identified disagreement with the NRC staff view in its 3/7 letter on ESP-18A regarding the nature of the NRC review and required determination re" alternative sites
18x Need for alternative energy source evaluation and review	*None		 * NEI commented on RS-002 (3/31) that that ESPAs need not address alt. sources
19. Addressing effects of potential new units at an existing site	Target 5/2		Resolution pending
20. Practical use of existing site/facility information	11/26	12/18	Resolved
21. Understanding the interface of ESP with the COL process.	COLTF Item*		 Purpose is clarity of expectations regarding reference to an ESP by a COL applicant Analogous to "COL Items" identified as part of the design certifications Issue to be transferred to COLTF *
22. Form and content of an ESP	4/30		 NEI draft included as enclosure with 12/20 ESP-6 letter Updated version to be provided via ESP-22 letter; NRC response to provide comments